Beef Packing Industry Structure and Organization

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Rapidly evolving

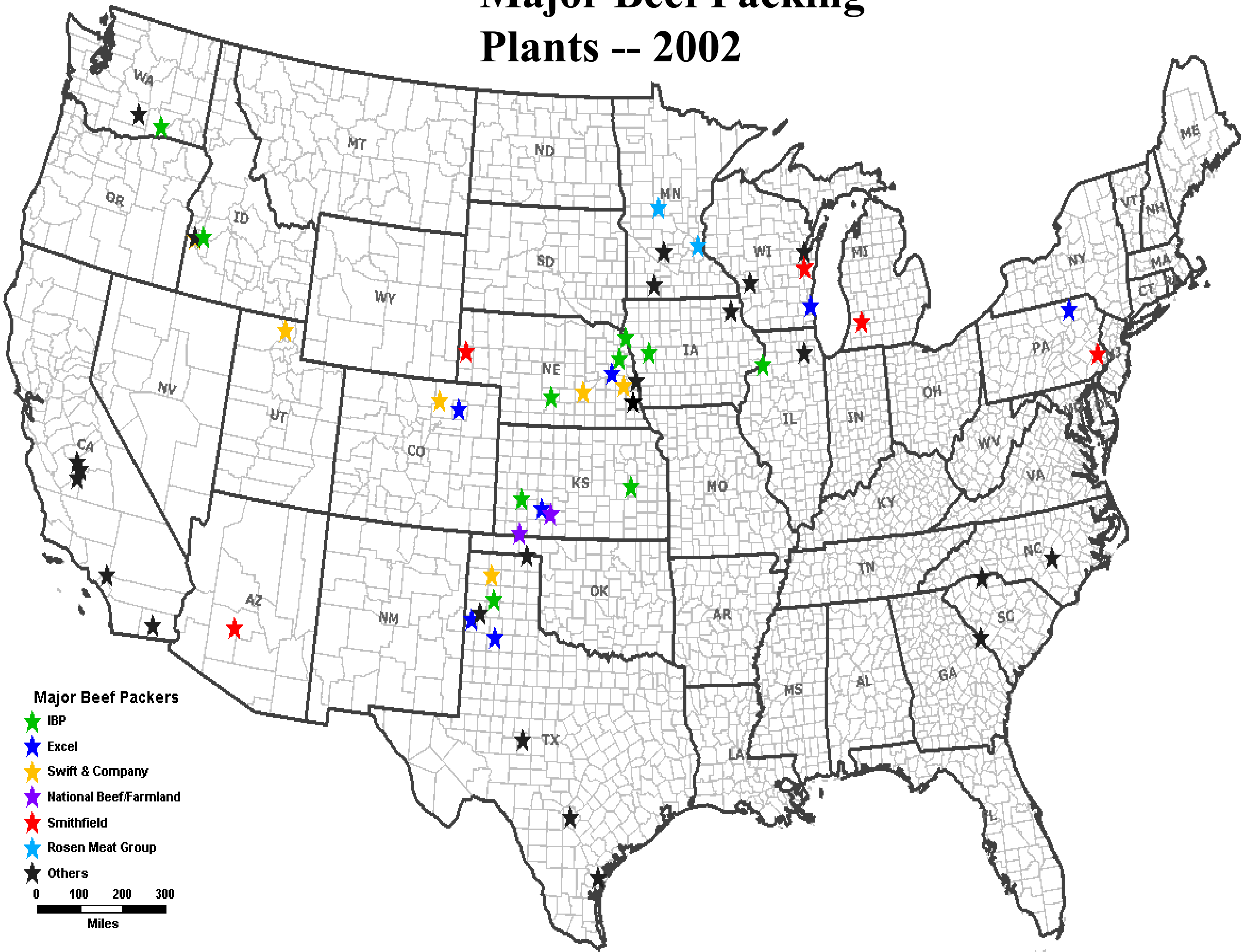
- **New players**
- **Consumer consolidation**
- **Customer and consumer demand shifts**
- **Increased pressure to consolidate**
- **Increased pressure to change vertical linkages**

- **All of this before BSE**

Beef Packing plants

- **Plants are where the cattle are**
- **Map shows top 30 packers' plant locations, most in major cattle-feeding states**
- **15 plants slaughter over 1 million steers and heifers annually (GIPSA 2001), handling approximately 20 million U.S. cattle**

Major Beef Packing Plants -- 2002



Economies of Size

- **Scale, utilization and expanded scope of processing economies have contributed to larger beef packing plants doing more extensive processing, squeezing out costs to stay competitive (MacDonald and Ollinger; Paul)**
- **Packing firm economies come from greater capacity utilization of plants, spreading overhead costs across more animals and valu-added products per plant, and more plants, and ability to serve larger customers more effectively in consolidated customer markets**

Changing players

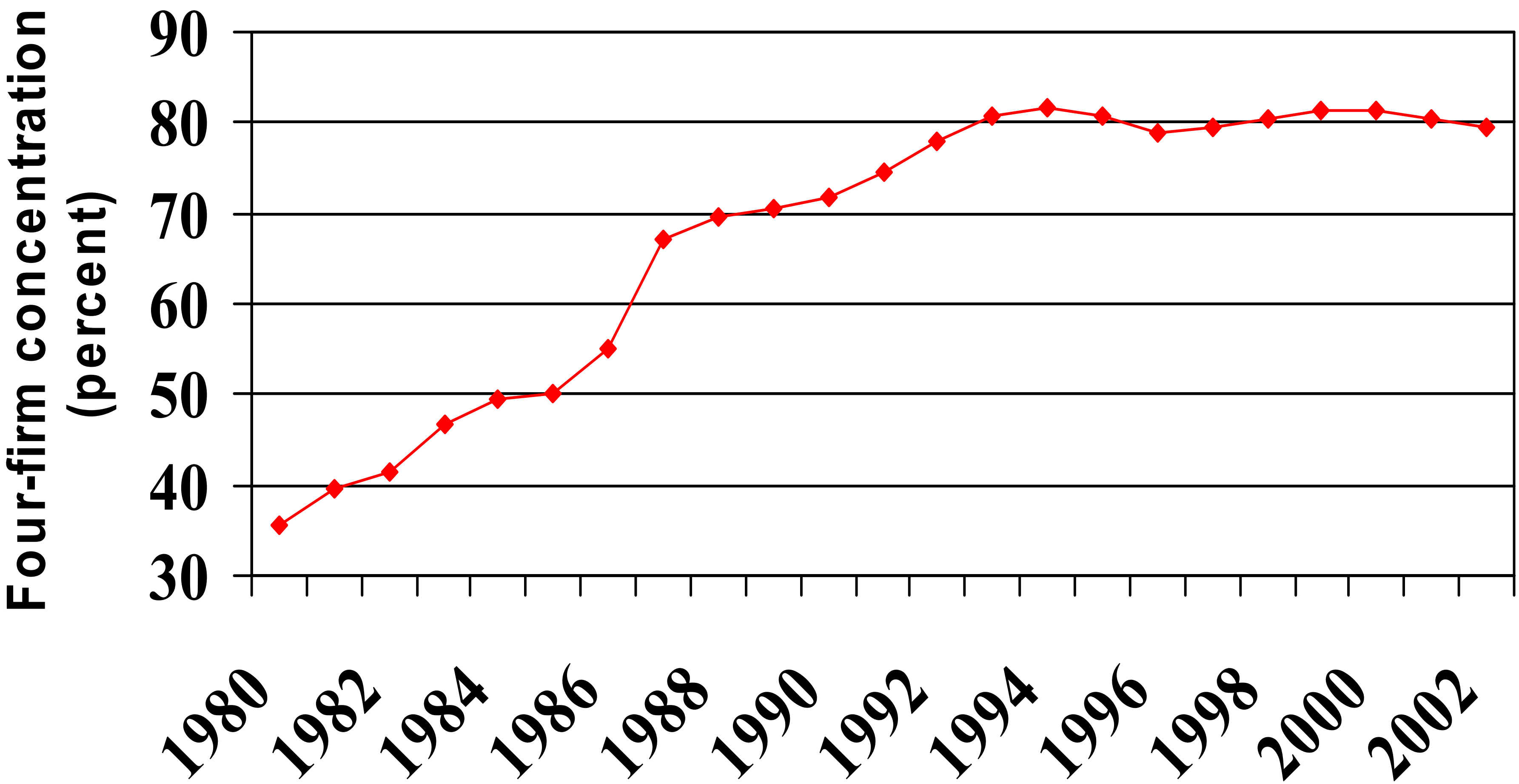
- Tyson Foods acquired IBP
- ConAgra gave Swift and Company its independence
- Farmland Industries bankruptcy led to U.S. Premium Beef (cooperative) and BPI purchase – National Beef Packing Co.
- Smithfield entered through acquisition of Moyer and Packerland
- Iowa Quality Beef – Iowa Cattlemen’s Association formed cooperative -- ranked 14th

Top 5 Packers – 2002 Volume

	Mil. head	Percent Fed Cattle
Tyson Foods	9.2	33.8
Excel (Cargill)	8.1	23.1
Swift & Company	5.2	16.9
National Beef	3.1	10.6
Smithfield Foods	2.1	5.3

Source: Cattle Buyers Weekly

Four-firm Steer and Heifer Concentration 1980-2002



Pressures for Change

- More customer assurances required
  - Organic food market growth
  - Meat and bone meal use
  - Antibiotic or hormone use
  - Animal/bird handling practices
  - Product Alliances – Niman Ranch, Laura's Lean, Coleman
  - Traceability required – Trust but Verify?

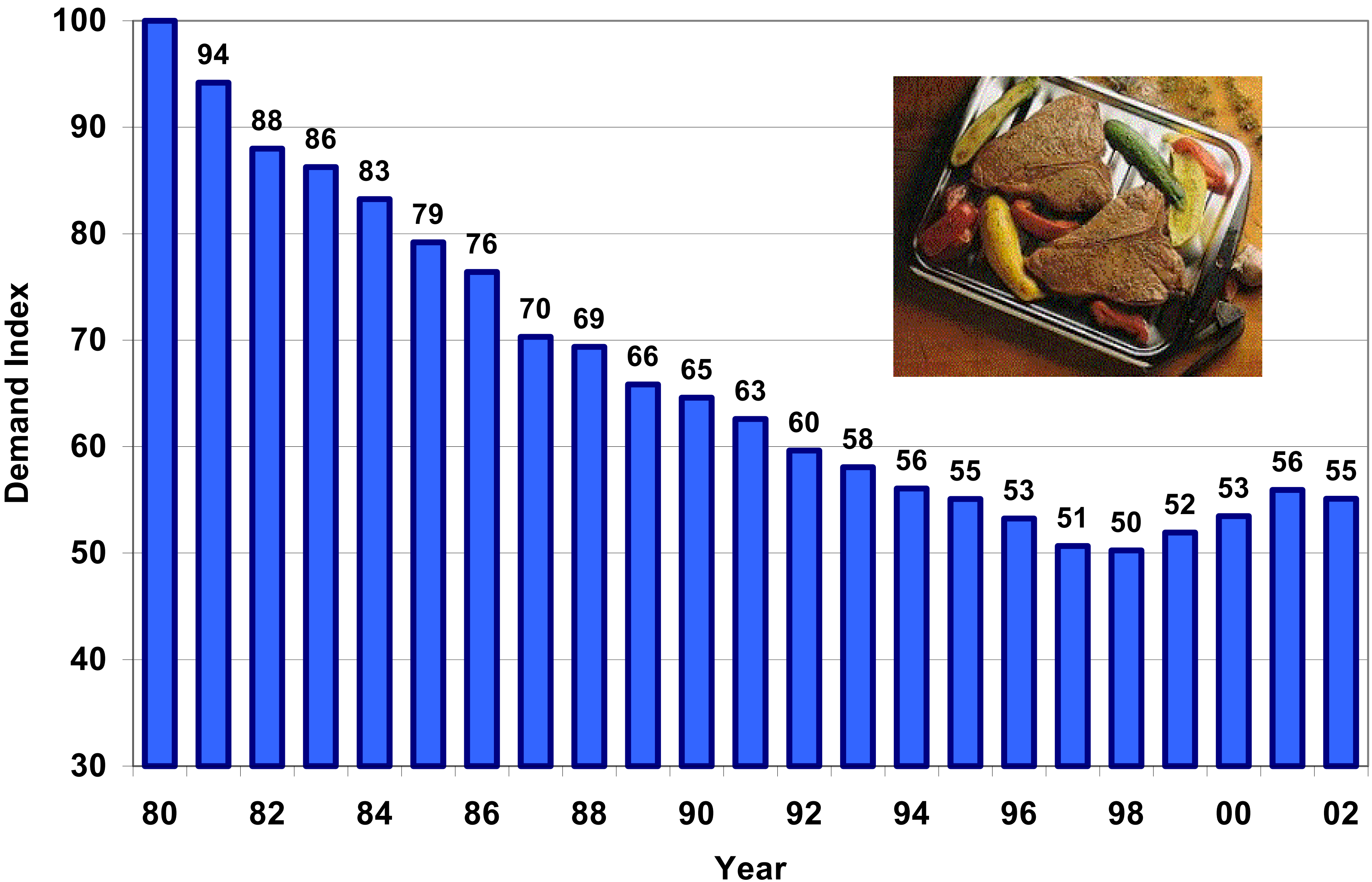
Pressures for Change

- Retail customer consolidation -- fewer, larger, more intense competition
- Wal-Mart – ization of the food industry!!
  - Purchasing power plus new labeling and handling systems and efficiencies
- Product differentiation via branding, ready-to-heat packaging, etc., is major growth area in beef, finally!
- Retail sole source suppliers of fresh meat product lines becoming more prevalent

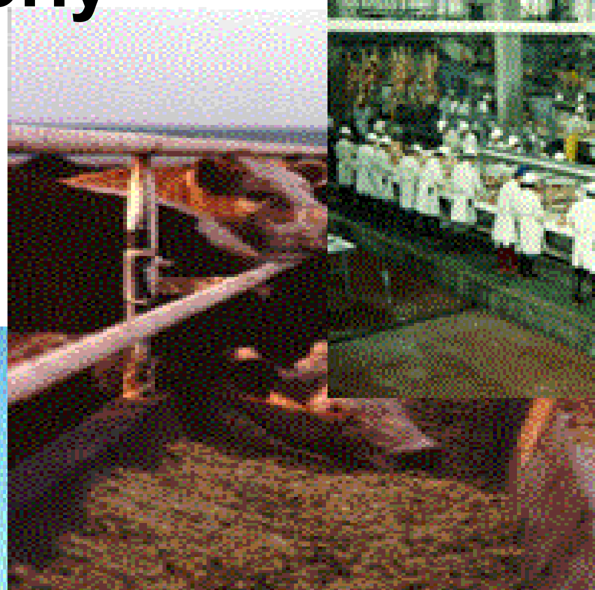
Pressures for Change

- **Positive demand effects of Atkins, South Beach and other low-carbohydrate diets offset prior negative fat and cholesterol image of beef -- sustainable or flash in pan??**
- **BSE concerns in U.S., Canada, Western Europe and Japan– the focus of next speakers**

U.S. Beef Demand Index (1980=100)



Markets at each stage coordinated chain, but system worked poorly



- highly varied product
- little price-quality distinction
- no incentives to improve
-1 in 5 “quality” steaks were too tough to chew!

Source: Schroeder

1. Fresh Branded Case-Ready Products

Branded beef used to be nonexistent

Now common

USDA has 50 beef certification programs

Vertical linkages changing

- Tighter links with customers and branded products requiring closer links with suppliers
- Packer ownership relatively low
- Large percentage purchased under forward contract and marketing agreements
- Alliances increasing in importance – Certified Angus Beef, etc.
- Packer ownership and control--controversial -- in Congress, legislatures and the courts

Cattle pricing methods

Period	Negotiated	Formula	Forward Contracts	Packer Owned
April - Dec 2001	41.10	51.93	3.34	3.62
2002	39.60	49.54	3.96	6.90
2003	46.41	40.26	6.38	6.95

Source: AMS Mandatory Price Reports

Packer Beef Marketing Outlets -- 1999

• Retail commodity sales	28 %
• Retail branded products	2
• Food service commodity sales	8
• Food service branded	1
• Further processing	19
• Export commodity sales	9
• Export branded sales	1
• Wholesaler or broker	22
• Other	11

Source: Hayenga, et al.

Packer Sales Methods -- 1999

• **Cash market, delivery within 21 days**	**70 %**
• **Forward fixed price contract -- delivery beyond 21 days**	**9**
• **Forward formula price contract -- priced off current cash market**	**8**
• **Long run agreement basis -- not on cash market**	**3**
• **Packer sets price and takes orders**	**7**
• **Packer bids for sales (bid-acceptance)**	**3**

Source: Hayenga, et al.

Overview

- **Tyson and Smithfield entry into beef packing and processing is a new dimension in overall meat industry competition**
- **ConAgra exodus from slaughter and fresh meat due to poor financial results**
- **Closer vertical links in the beef chain are responses to increasing demands for reduced risks (quality, quantity, financial) and costs, better information transmission, enhance profits and competitiveness**
- **More change is yet to come in response to increasing stresses and demands being placed on the system by customers, especially!**